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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,821	06/04/2001	Imants R. Lauks	PAT 485-2	1985

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EXAMINER
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CHOI, LING SIU

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/871,821

Applicant(s)

LAUKS, IMANTS R.

Examiner

Ling-Siu Choi

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 25-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/01-1/03-1,3,8/05</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This Office Action is in response to the Response to Restriction Requirement filed November 7, 2005. Claims 25-56 of Group II have been elected **without traverse**.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --  
 (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 25-56 are rejected under 35 U.S.C. 102(b) as being anticipated by Lauks (US 4,933,048).

An integrated electrokinetic circuit for transport of an aqueous solute, comprising a device for electrokinetic transport of an aqueous solute, the device comprising	
1	an <b><u>electrically insulating substrate</u></b>
2	a <b><u>conductor element</u></b> for electrokinetic transport of the solute, the conductor element in the form of <b><i>a solid hydrophilic-matrix layer on the substrate,</i></b> <i>the matrix layer being in a substantially dry, inactive state wherein electrokinetic transport is substantially prevented</i> and having a first surface engaging the

	substrate and a second surface
3	a <b>cover layer</b> for electrically insulating and covering the second surface, the cover layer being impermeable to the solute
whereby <i>exposure of the hydrophilic matrix to water converts the matrix from the inactive state to a hydrated, active state permitting electrokinetic transport of the solute</i>	

(summary of claim 25)

Lauks discloses a reference electrode comprising a metal member on a **substrate** and a layer of a salt reversible to the ion X overlying the metal member, which may be a **polymer gel** having a salt including the ion X dispersed therein, this structure being overlaid by a **membrane permeable to water but not to ion X** that extends beyond the portion of the electrolyte overlying the electrode (abstract). Lauks further disclose that this assembly may be **shipped dry** and in use, when the electrode is disposed in an aqueous solution containing an ionic species to be measured, **water permeates the membrane and wet up the electrolyte** relatively quickly (abstract). The present claims are anticipated by the disclosure of Lauks.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

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said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 25-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheldon, III et al. (US 6,129,828) in view of Boschetti et al. (US 4,048,377).

Sheldon, III et al. disclose an apparatus for active biological sample preparation, comprising a sample being pre-prepared and densified by passing through a **conductive polymer** (abstract).

The difference between the present claims and the disclosure of Sheldon, III et al. is the requirement of an integrated electrokinetic circuit for transport of an aqueous solute comprising a **rehydratable film**.

Boschetti et al. disclose a dried film which is rehydratable into aqueous gel film, comprising agarose or gelose and a water-soluble linear polymer or copolymer of acrylamide or methacrylamide (abstract). Boschetti et al. further disclose that such rehydratable film is easily handled and stored (col.1, lines 29-34). In light of such benefit, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the rehydratable film in the disclosure of Sheldon, III et al. and thereby obtain the present invention.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling-Siu Choi whose telephone number is 571-272-1098.

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If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reach on 571-272-1114.



**LING-SUI CHOI**  
**PRIMARY EXAMINER**

January 20, 2006